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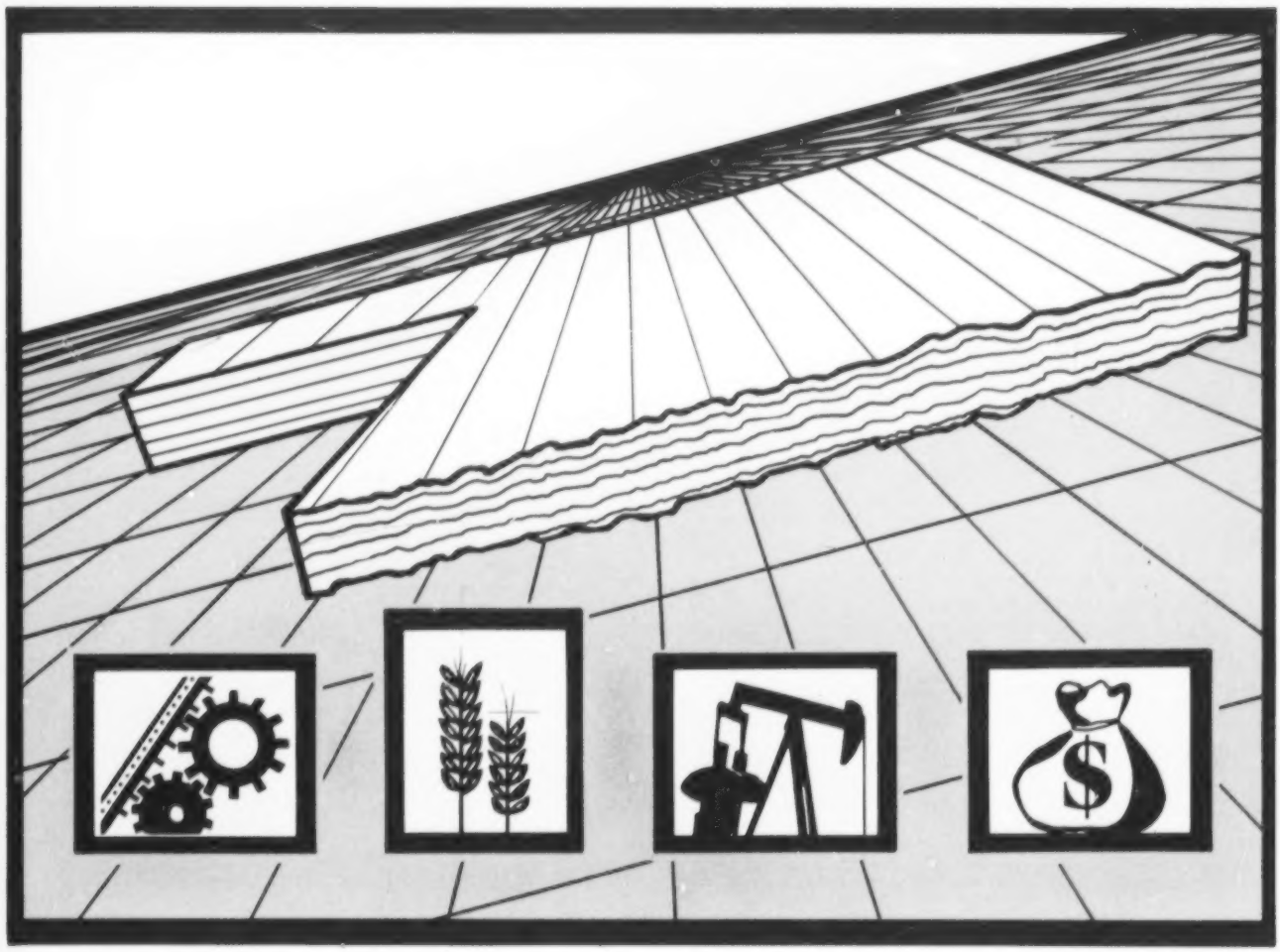

The *Oklahoma Business Bulletin* is now combined with the *Review of Regional Economics and Business*. There will be four quarterly expanded editions of the *Bulletin* which will contain both articles and the usual statistical information on Oklahoma and its major centers. The remaining eight monthly issues of the *Bulletin* will contain only the statistical summaries, although articles on timely subjects might also appear in these inter-quarterly issues. The combination of these two publications will provide a more thorough examination of economic problems prevalent in Oklahoma as well as continuing to provide economic data which has long been presented in the *Oklahoma Business Bulletin*.

This publication change at the Center has been assisted by funding provided by the Robert S. and Grayce B. Kerr Foundation Inc., for which the Center is most grateful.

We at the Center are most hopeful that the Oklahoma oriented articles will assist State leaders and citizens in their efforts to solve the economic problems now facing the State.

George W. England
Director

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The Editorial Review Board welcomes original manuscripts, studies, and research reports from persons in both the public and private sector in any area of economics and business administration. The editorial policy of the *Bulletin* promotes a free exchange of ideas and analyses. Accordingly, the contents do not necessarily reflect the views of the editor or the publisher.

Manuscripts for consideration should be typed, double-spaced, and submitted in duplicate. Each submitted manuscript is reviewed by at least two members of the Editorial Review Board and a decision is usually reached in four to six weeks.

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SUMMARY OF INDICATORS

Category	3 Mos. '87	3 Mos. '86	March '87	Percentage Change 3 Mos. '87/'86	Percentage Change March/Feb. '87
Personal Income (Monthly Average)[a]					
Unadjusted ($000,000)	3,552.7	3,412.7	3,625.1	4.1	0.7
Adjusted for CPI ($000,000)	1,062.1	1,042.7	1,079.2	1.9	0.2
Crude Oil Production (000 bbl)	31,266	39,453	11,238	-20.8	13.4
Industrial Power Sales (000,000 Kwh)[b]	1,928	2,060	640	-6.4	-2.2
Total Bank Deposits ($000,000)[c]					
Demand	7,534	7,665	7,491	-1.7	-1.1
Savings	26,066	27,530	25,590	-5.3	-2.4
Savings and Loan Associations ($000,000)					
Assets	10,098.5	9,982.3	10,164.4	1.2	3.8
New Mortgage Loans	226.4	260.8	70.0	-13.2	7.5
General Business Index	93.1	92.2	95.7	0.2	4.4

[a]Includes revisions.
[b]Sales of larger privately owned utility companies.
[c]Total deposits of all depository institutions.

SELECTED ECONOMIC INDICATORS

Category	3 Mos. '87	3 Mos. '86	March '87	Percentage Change 3 Mos. '87/'86	Percentage Change March/Feb. '87
PERMIT-AUTHORIZED CONSTRUCTION					
Residential—Single Family					
Dollar Value ($000)	81,649	94,077	39,939	-13.2	75.5
Number of Units	1,267	1,562	641	-18.9	89.6
Residential—Multi Family					
Dollar Value ($000)	12,340	34,204	10,423	-63.9	526.1
Number of Units	537	1,040	458	-48.4	554.3
Nonresidential					
Commercial ($000)	55,455	48,199	19,153	15.1	-0.7
Industrial ($000)	4,272	4,967	1,892	-14.0	14.2
Institutional ($000)	10,008	16,747	5,623	-40.2	78.2
Nonbuilding					
Streets and Highways ($000)	20,703	50,403	11,494	-58.9	70.5
All Other Nonbuilding ($000)	1,593	3,877	813	-58.9	124.4
Total Construction ($000)	186,019	252,473	89,335	-26.3	60.6
EMPLOYMENT TRENDS					
Total Labor Force (000)[a]	1,563.2	1,573.4	1,566.2	-6.5	0.2
Total Employment (000)	1,429.1	1,452.2	1,432.8	-1.6	0.4
Agriculture (000)	32.4	43.4	35.5	-25.4	14.1
Nonagriculture (000)	1,396.7	1,408.8	1,397.3	-0.9	0.1
Manufacturing (000)	158.6	166.8	158.0	-4.9	-0.5
Mining (000)	52.9	59.7	52.7	-11.4	0.0
Government (000)	253.9	254.5	255.6	-0.2	0.2
Contract Construction (000)	38.1	39.1	38.5	-2.6	2.1
Services (000)	222.8	221.8	224.9	0.4	1.3
Retail Trade (000)	212.3	213.5	210.3	-0.6	-0.3
Unemployment Rate (%)	8.6	7.7	8.5	—	—
Average Weekly Hours					
Manufacturing (Per Worker)	41.2	41.1	41.1	0.2	-0.7
Average Weekly Earnings					
Manufacturing ($ Per Worker)	405.76	409.32	408.53	-0.9	0.9
Contract Construction ($ Per Worker)	417.10	389.42	432.71	7.1	4.3
Retail Trade Excluding Eating and Drinking Places($ Per Worker)	187.31	186.98	189.72	0.2	0.5

Note: Includes revisions.
[a]Civilian Labor Force.

RETAIL TRADE IN METRO AREAS AND STATE
($000)

Retail Trade	3 Mos. '87 Adjusted	3 Mos. '86 Adjusted	March '87 Adjusted	March '87 Unadjusted	Percentage Change 3 Mos. '87/'86 Adjusted	Percentage Change March/Feb. '87 Adjusted	Percentage Change March/Feb. '87 Unadjusted
OKLAHOMA CITY MSA							
Food	549,319	537,891	178,575	184,273	2.1	-2.5	5.9
Apparel	46,421	50,232	15,496	15,297	-7.6	-8.8	16.3
General Merchandise	175,717	202,669	57,380	53,550	-13.3	-4.3	13.4
Furniture	73,845	61,795	22,446	21,141	19.5	-14.5	-7.9
Lumber	41,271	57,104	13,977	14,084	-27.7	2.8	41.4
Auto Dealers	403,593	470,183	127,385	117,139	-14.2	-6.3	-9.0
Service Stations	51,590	59,087	16,355	14,877	-12.7	-2.1	-0.2
All Other	182,791	175,078	54,166	54,352	4.4	-17.2	18.0
Total	1,524,547	1,614,039	485,780	474,713	-5.5	-6.2	3.9
TULSA MSA							
Food	327,791	338,289	107,900	108,932	-3.1	-1.3	4.7
Apparel	42,324	45,670	14,469	14,017	-7.3	3.9	32.7
General Merchandise	139,801	152,638	47,231	45,603	-8.4	-1.7	20.7
Furniture	57,123	58,264	17,944	17,144	-2.0	-0.3	6.9
Lumber	36,309	47,394	12,042	11,749	-23.4	-7.0	31.1
Auto Dealers	234,836	273,580	74,121	68,157	-14.2	-6.3	-9.0
Service Stations	42,381	48,546	13,435	12,221	-12.7	-2.1	-0.2
All Other	19,278	22,059	4,412	4,068	-12.6	-48.9	-16.9
Total	899,843	986,440	291,554	281,891	-8.8	-4.0	4.6
ENID MSA							
Food	27,028	29,520	8,275	8,222	-8.4	-9.6	-3.0
Apparel	4,419	4,871	1,388	1,431	-9.3	-2.3	25.5
General Merchandise	11,691	12,623	3,839	3,678	-7.4	-1.2	25.0
Furniture	3,221	2,913	962	961	10.6	-23.7	-10.8
Lumber	3,939	4,798	1,261	1,215	-17.9	-6.9	35.6
Auto Dealers	23,099	26,906	7,290	6,704	-14.1	-6.3	-9.0
Service Stations	3,804	4,358	1,206	1,097	-12.7	-2.0	-0.2
All Other	8,379	12,923	2,481	2,290	-35.2	-10.6	15.1
Total	85,580	98,912	26,702	25,598	-13.5	-7.5	2.4
LAWTON MSA							
Food	49,045	44,215	15,180	15,633	10.9	15.2	4.2
Apparel	5,619	5,012	1,781	1,809	12.1	1.8	34.5
General Merchandise	35,761	27,028	11,889	10,546	32.3	-7.0	-1.0
Furniture	6,411	7,661	2,115	2,222	-16.3	7.4	20.9
Lumber	4,637	6,300	1,703	1,666	-26.4	15.1	30.5
Auto Dealers	30,785	35,864	9,717	8,935	-14.2	-6.3	-9.0
Service Stations	2,596	2,971	823	748	-12.6	-2.1	-0.3
All Other	11,162	11,584	3,664	3,841	-3.6	-48.1	12.0
Total	146,016	140,635	46,872	45,400	3.8	-5.2	2.9
MUSKOGEE AREA							
Food	35,477	35,670	11,636	11,162	-0.5	-1.9	2.5
Apparel	5,121	4,579	1,660	1,715	11.8	-3.2	30.6
General Merchandise	9,371	10,604	3,345	3,280	-11.6	17.3	47.4
Furniture	3,138	3,541	964	854	-11.4	-15.4	-14.9
Lumber	1,419	1,829	475	441	-22.4	-0.2	34.9
Auto Dealers	19,428	22,634	6,131	5,636	-14.2	-6.3	-9.0
Service Stations	3,364	3,853	1,095	960	-12.7	1.5	-0.2
All Other	9,006	7,354	2,639	2,620	22.5	-15.0	52.2
Total	86,324	90,064	27,945	26,668	-4.2	-2.9	8.2
STATE[a]							
Durable Goods	1,457,335	1,688,965	469,596	430,892	-13.7	-3.9	-2.5
Auto Dealers	1,008,568	1,174,955	318,332	292,728	-14.2	-6.3	-9.0
Accessory Dealers	83,415	88,737	29,723	27,925	-6.0	7.8	23.8
Total Automotive	1,091,983	1,263,692	348,055	320,653	-13.6	-5.2	-6.8
Furniture	67,994	77,108	23,099	21,955	-11.8	4.8	17.6
Household Appliances	60,090	62,982	18,893	17,344	-4.6	-13.5	-9.9
Total Furniture and Appliances	128,084	140,090	41,992	39,299	-8.6	-4.3	3.6
Lumber and Building Materials	137,772	177,287	45,070	45,041	-22.3	-5.3	29.6
Hardware Stores	15,941	17,111	5,459	5,287	-6.8	0.5	25.0
Total Lumber, Building Materials & Hardware	153,713	194,398	50,529	50,328	-20.9	-4.7	29.1
Nondurable Goods	2,793,404	2,781,897	914,180	869,696	0.4	-0.8	9.5
Apparel	157,702	157,792	52,526	51,856	-0.1	-1.3	28.2
Drug Stores	138,107	122,682	43,125	42,681	12.6	-3.5	-0.3
Eating and Drinking Places	477,326	463,866	152,502	156,591	2.9	-6.2	7.9
Food Group	1,158,190	1,127,516	367,282	368,503	2.7	-2.5	6.0
Service Stations	169,427	194,040	53,715	48,858	-12.7	-2.1	-0.2
General Merchandise Group	473,595	505,485	161,897	141,448	-6.3	3.1	22.5
Total Retail Trade	4,250,739	4,470,862	1,383,776	1,300,588	-4.9	-1.9	5.2

[a]Total includes data for categories not shown in the table.

RETAIL TRADE IN SELECTED CITIES
($000)

Retail Trade	3 Mos. '87 Adjusted	3 Mos. '86 Adjusted	March '87 Adjusted	March '87 Unadjusted	Percentage Change 3 Mos. '87/'86 Adjusted	Percentage Change March/Feb. '87 Adjusted	Percentage Change March/Feb. '87 Unadjusted
Ada	40,363	43,667	13,210	12,740	-7.6	-1.9	6.0
Altus	35,535	39,129	11,353	10,994	-9.2	-2.4	6.2
Alva	9,906	12,645	2,692	2,496	-21.7	-23.8	-18.8
Anadarko	15,742	16,434	6,151	6,203	-4.2	29.0	43.6
Ardmore	54,040	56,540	16,755	15,985	-4.4	-9.6	-1.9
Bartlesville	55,721	61,027	17,961	17,231	-8.7	-5.1	0.7
Blackwell	8,705	10,653	2,825	2,697	-18.3	-4.9	2.4
Broken Arrow	52,556	57,131	16,925	16,428	-8.0	-2.7	9.2
Chickasha	25,427	29,516	8,201	8,009	-13.9	-3.4	4.3
Clinton	18,126	19,588	5,864	5,455	-7.5	-3.0	1.1
Cushing	14,949	19,091	4,870	5,036	-21.7	-2.1	14.2
Del City	35,747	30,002	9,142	8,995	19.1	-44.6	-42.2
Duncan	36,801	42,303	12,121	11,696	-13.0	-3.5	3.5
Durant	27,693	28,600	9,372	8,590	-3.2	9.9	15.8
Edmond	67,729	75,269	21,877	21,369	-10.0	-4.4	3.6
Elk City	20,549	24,902	6,792	6,441	-17.5	0.5	7.4
El Reno	21,413	25,535	6,845	6,785	-16.1	-3.5	4.0
Guthrie	15,268	18,398	4,835	4,621	-17.0	-7.2	6.3
Guymon	13,072	15,217	4,281	4,027	-14.1	-1.9	7.9
Henryetta	13,158	15,829	4,244	4,135	-16.9	-3.1	10.4
Hobart	6,736	7,962	2,082	2,032	-15.4	-3.7	3.4
Holdenville	7,704	9,277	2,441	2,418	-17.0	-7.0	2.8
Hugo	7,106	9,462	2,234	2,075	-24.9	-4.7	-6.2
Idabel	11,215	12,866	3,629	3,522	-12.8	-3.4	5.7
Lawton	146,425	141,949	46,486	44,770	3.2	-6.2	2.1
McAlester	27,575	32,885	8,225	7,837	-16.1	-14.2	-4.7
Miami	32,289	37,949	10,369	10,154	-14.9	-5.1	6.3
Midwest City	95,351	108,838	31,320	31,997	-12.4	-6.8	7.6
Moore	38,981	37,321	12,356	12,334	4.4	-7.0	5.8
Muskogee	83,255	86,271	26,925	25,652	-3.5	-4.7	7.4
Norman	167,723	192,987	54,323	51,310	-13.1	-4.7	-1.4
Oklahoma City	771,238	833,909	250,404	242,073	-7.5	-3.1	7.9
Okmulgee	15,131	18,081	4,549	4,467	-16.3	-12.5	-5.6
Pauls Valley	10,685	12,682	3,468	3,303	-15.7	-4.8	-1.8
Pawhuska	5,112	5,980	1,718	1,542	-14.5	-6.2	0.0
Ponca City	43,265	48,119	13,746	13,095	-10.1	-6.7	2.7
Poteau	12,781	14,993	4,047	3,889	-14.8	-6.4	0.5
Sand Springs	23,751	24,804	7,852	7,761	-4.2	2.6	17.2
Sapulpa	35,388	43,449	11,365	11,140	-18.6	-3.9	5.7
Seminole	17,018	21,539	5,707	5,422	-21.0	1.4	11.0
Shawnee	69,496	68,438	22,211	20,627	1.5	-4.3	2.9
Stillwater	68,752	62,095	22,207	20,217	10.7	-4.4	0.1
Tahlequah	22,407	23,151	7,284	6,924	-3.2	-3.2	7.6
Tulsa	684,751	741,056	222,921	214,497	-7.6	-3.6	3.7
Watonga	4,343	5,622	1,392	1,335	-22.7	-7.1	2.2
Weatherford	14,785	18,987	4,852	4,577	-22.1	0.9	2.6
Wewoka	3,632	3,752	1,232	1,205	-3.2	-0.9	5.0
Woodward	31,295	36,882	9,856	9,381	-15.1	-6.3	2.5
Total Selected Cities	3,040,690	3,302,782	981,517	945,489	-7.9	-4.6	4.0

ENID AND LAWTON MSAs

Category	3 Mos. '87	3 Mos. '86	March '87	Percentage Change 3 Mos. '87/'86	Percentage Change March/Feb. '87
ENID MSA					
Employment (Number)[a]					
Labor Force	29,700	31,667	29,800	-6.2	1.0
Total Employment	27,100	29,400	27,200	-7.8	1.1
Unemployment Rate (%)	8.7	7.1	8.7	—	—
Industrial Power Sales (000 Kwh)	110,219	122,449	34,762	-10.0	-1.3
PERMIT-AUTHORIZED CONSTRUCTION[a]					
Residential—Single Family					
Dollar Value ($000)	10	736	0	-98.6	0.0
Number of Units	1	10	0	-90.0	0.0
Residential—Multi Family					
Dollar Value ($000)	0	0	0	0.0	0.0
Number of Units	0	0	0	0.0	0.0
Nonresidential					
Commercial ($000)	22	70	6	-68.9	5.1
Industrial ($000)	444	0	444	—	—
Institutional ($000)	0	0	0	0.0	0.0
Nonbuilding					
Streets and Highways ($000)	0	0	0	0.0	0.0
All Other Nonbuilding ($000)	71	0	44	—	223.9
Total Construction ($000)	547	806	494	-32.1	E
LAWTON MSA					
Employment (Number)[a]					
Labor Force	47,342	47,667	47,600	-0.7	1.3
Total Employment	44,817	45,300	45,100	-1.1	1.6
Unemployment Rate (%)	5.4	4.9	5.3	—	—
Industrial Power Sales (000 Kwh)	44,072	41,065	15,582	7.3	6.0
PERMIT-AUTHORIZED CONSTRUCTION[a]					
Residential—Single Family					
Dollar Value ($000)	5,551	5,709	3,488	-2.8	213.3
Number of Units	87	98	53	-11.2	152.4
Residential—Multi Family					
Dollar Value ($000)	400	767	0	-47.8	0
Number of Units	16	30	0	-46.7	—
Nonresidential					
Commercial ($000)	1,035	1,546	729	-33.1	386.0
Industrial ($000)	20	150	0	-86.7	—
Institutional ($000)	0	0	0	0.0	0.0
Nonbuilding					
Streets and Highways ($000)	0	417	0	—	0.0
All Other Nonbuilding ($000)	0	0	0	0.0	0.0
Total Construction ($000)	7,006	8,588	4,217	-18.4	150.5

[a]Includes revisions in some previous months.

E = exceeds 600 percent.

MUSKOGEE MA

Category	3 Mos. '87	3 Mos. '86	March '87	Percentage Change 3 Mos. '87/'86	Percentage Change March/Feb. '87
Employment (Number)[a]					
Labor Force	33,000	32,333	33,125	2.1	0.4
Total Employment	29,967	29,100	30,075	3.0	0.3
Unemployment Rate (%)	9.2	10.0	9.2	—	—
Industrial Power Sales (000 Kwh)	47,584	40,449	16,115	17.6	-6.4
PERMIT-AUTHORIZED CONSTRUCTION[a]					
Residential—Single Family					
Dollar Value ($000)	1,487	1,611	520	-7.7	7.4
Number of Units	20	24	6	-16.7	-14.3
Residential—Multi Family					
Dollar Value ($000)	75	2,658	75	-97.2	—
Number of Units	2	49	2	-95.9	—
Nonresidential					
Commercial ($000)	5,771	417	5,275	E	E
Industrial ($000)	886	1,502	20	-41.0	-97.7
Institutional ($000)	0	559	0	--	0.0
Nonbuilding					
Streets and Highways ($000)	0	0	0	0.0	0.0
All Other Nonbuilding ($000)	0	25	0	—	0.0
Total Construction ($000)	8,220	6,773	5,890	21.4	247.2

[a]Includes revisions in some previous months.

TULSA MSA

Category	3 Mos. '87	3 Mos. '86	March '87	Percentage Change 3 Mos. '87/'86	Percentage Change March/Feb. '87
Employment (Number)[a]					
Labor Force	356,967	349,100	357,100	2.2	-0.1
Total Employment	324,400	321,100	324,400	1.0	0.2
Manufacturing	50,200	52,167	49,700	-3.8	-0.8
Mining	17,067	18,267	16,700	-6.6	-1.8
Government	37,267	37,100	37,200	0.4	-1.3
Wholesale and Retail Trade	72,867	72,133	72,600	1.0	0.3
Unemployment Rate (%)	9.1	8.0	9.2	—	—
Average Weekly Earnings Manufacturing ($ Per Worker)					
Industrial Power Sales (000 Kwh)	484,712	481,391	162,591	0.7	-2.7
Mortgage Loans Closed ($000,000)[b]	81.9	64.1	22.3	27.8	10.9
Bank Deposits ($000,000)[c]					
Demand Deposits	867,641	728,848	845,843	19.0	-1.8
Time and Savings Deposits	2,414,668	2,101,778	2,413,605	14.9	-0.3
Air Transportation					
Passengers Enplaning (Number)	311,254	305,296	125,331	2.0	34.4
Passengers Deplaning (Number)	317,300	309,112	128,847	2.6	38.5
Freight (Tons)	3,698	2,598	1,229	8.6	42.3
Water Transportation					
Tulsa Port of Catoosa					
Tons In	108,380	155,246	36,294	-30.2	7.2
Tons Out	341,231	425,901	130,406	-19.9	31.2
PERMIT-AUTHORIZED CONSTRUCTION[a]					
Residential—Single Family					
Dollar Value ($000)	30,509	26,223	14,916	16.3	85.2
Number of Units	438	419	227	4.5	118.3
Residential—Multi Family					
Dollar Value ($000)	10,274	15,199	9,988	-32.4	E
Number of Units	455	422	444	7.8	E
Nonresidential					
Commercial ($000)	8,305	8,663	1,982	-4.1	81.8
Industrial ($000)	1,323	1,506	517	-12.1	-30.6
Institutional ($000)	3,464	3,847	1,132	-10.0	-47.6
Nonbuilding					
Streets and Highways ($000)	720	7,967	339	-91.0	-10.9
All Other Nonbuilding ($000)	653	1,595	293	-59.1	75.7
Total Construction	55,247	65,000	29,168	-15.0	129.0
General Business Index	87.6	90.1	89.2	-2.7	2.7

E = Exceeds 600 percent.
[a] Includes revisions.
[b] By savings and Loan Associations.
[c] Total deposits in large commercial banks.

OKLAHOMA CITY MSA

Category	3 Mos. '87	3 Mos. '86	March '87	Percentage Change 3 Mos. '87/'86	Percentage Change March/Feb. '87
Employment (Number)[a]					
Labor Force	500,033	511,800	501,300	-2.3	0.3
Total Employment	476,933	480,800	499,700	-0.8	7.4
Manufacturing	48,733	50,967	48,500	-4.4	-0.6
Mining	11,933	14,400	11,800	-14.8	0.0
Government	98,100	99,733	98,100	-1.6	0.0
Wholesale and Retail Trade	97,000	105,400	96,100	-7.7	-1.0
Unemployment Rate (%)	6.8	6.2	6.9	—	—
Average Weekly Earnings					
Manufacturing ($ Per Worker)	441.37	447.34	444.91	-1.3	0.1
Industrial Power Sales (000 Kwh)	287,725	305,861	98,413	-5.9	-1.0
New Mortgage Loans ($000,000)[b]	52.6	68.2	26.7	-32.9	100.8
Bank Deposits ($000,000)[c]					
Demand Deposits	945.0	1,037.2	927.9	-8.9	-7.3
Time and Savings Deposits	1,922.4	2,312.6	1,770.7	-16.9	-8.9
Air Transportation					
Passengers Enplaning (Number)	332,979	326,606	135,729	2.0	33.4
Passengers Deplaning (Number)	341,538	341,823	138,699	-0.1	36.1
Freight Enplaned (Tons)	1,593	1,490	568	6.9	7.6
Freight Deplaned (Tons)	2,582	2,412	922	7.0	7.4
PERMIT-AUTHORIZED CONSTRUCTION[a]					
Residential—Single Family					
Dollar Value ($000)	37,142	51,238	18,117	-27.5	65.6
Number of Units	629	877	312	-28.3	74.3
Residential—Multi Family					
Dollar Value ($000)	983	13,797	143	-92.9	-83.0
Number of Units	45	438	5	-89.7	-87.5
Nonresidential					
Commercial ($000)	36,839	29,952	9,627	23.0	-43.8
Industrial ($000)	1,494	1,696	815	-11.9	E
Institutional ($000)	1,872	3,272	940	-42.8	0.8
Nonbuilding					
Streets and Highways ($000)	6,977	18,273	4,415	-61.8	130.7
All Other Nonbuilding ($000)	728	1,590	361	-54.2	120.1
Total Construction ($000)	86,035	119,819	34,418	-28.2	7.8
General Business Index	86.7	87.8	88.4	-1.2	1.0

E = Exceeds 600 percent.
[a]Includes revisions in some previous months.
[b]By savings and loan associations.
[c]Total deposits in large commercial banks.

Sources for all tables: Local utilities companies; 10th Federal Reserve District Member Banks; Federal Home Loan Bank of Topeka; Oklahoma Employment Security Commission; United States Department of Commerce, Construction Statistics Division; Oklahoma Department of Transportation, *Progressive Report of the Transportation Director*; Center for Economic and Management Research, College of Business Administration, The University of Oklahoma. The data for all tables were compiled by Marjorie E. Earley, Statistician for CEMR and Brian Hickey, Research Assistant.

Business Highlights

Neil J. Dikeman, Jr.

Economic conditions during the first quarter of 1987 were about as expected with no significant changes occurring in business activity. In fact, the few modest increases were largely countered by decreases in other sectors thus leaving the level of business during the period only fractionally higher than that of the same period a year ago.

Possibly the most notable increase over year ago totals was that of 4.9 percent in personal income. This gain exceeded the rise in inflation over the period and as a result real personal income for the year to date was 1.9 percent higher than for the same period last year. Also, assets of savings and loan associations rose 1.2 percent during the quarter despite a sharp drop of 13.2 percent in mortgage loans closed. This suggests that more of the deposits in these institutions were being placed in investments such as securities and in other forms of assets.

On the negative side, crude oil production continued the decline begun two years ago so that the total for the quarter was off that of the same period last year by 21.5 percent. However, March output rose by 10.5 percent over February productions which reduced the deficit from 1986 levels considerably.

Manufacturing activity as measured by industrial power sales and employment also experienced a decline from 1986 as power sales during the quarter were 6.4 percent less than for the same period last year and average monthly employment was down by 8.2 thousand jobs which was nearly 5 percent less than the average for the first three months of 1986. The decrease in manufacturing employment was accompanied by a fractional increase in average weekly hours worked and a decline in average weekly wages of $3.56 per worker.

Construction activity shows no sign of reversing the downward pattern of the past three years at least at this time. Total construction activity for the first quarter of this year, as measured by the dollar value of building permits issued, was 26.3 percent below year ago levels despite a near 61 percent increase in March. The most significant losses experienced thus far this year included the drop of 63.9 percent in the value of multifamily dwellings, the 58.9 percent decreases in both street and highway and other non-building activities and the 40.2 percent decline in institutional building. Lesser decreases from year ago levels of 13.2 percent and 14 percent in the value of single family homes and industrial buildings respectively coupled with a 15 percent rise in commercial building tempered the extent of the sharp drops in other types of construction. The one bright note in the construction picture which may signal some turnaround in this industry later this year is the fact that during March all types of construction activity except for commercial building experienced greater than seasonal gains. This, in turn, helped raise the average weekly wages paid to construction workers by 4.3 percent during the mouth.

The employment picture during the first quarter also remains rather bleak despite marginal gains which occurred during March. The most noticeable lags during the first quarter of the year were those of mining employment where average monthly employment was off year ago levels by 11.4 percent, farm employment which was 25.4 percent below the same period in 1986 and manufacturing employment was nearly 5 percent less than last year. The one bright spot was average monthly service employment which rose by 0.4 percent (or 1,000 jobs) from the 1986 level. As a result of the rather large decreases, total employment for the quarter was more than 23 thousand jobs less than at this time last year but since the average total labor force declined by 10 thousand job seekers over the same period the impact of job losses was reduced thus holding the average unemployment rate for the quarter to 8.6 percent of the total labor force.

As was expected, retail sales during the first quarter of 1987 declined 4.9 percent from the total for the same period last year. This decrease was due primarily to a

drop of 13.7 percent in sales of durable goods which more than offset the fractional gain in sales of nondurables. The drop in durable goods sales extended to all lines of merchandise with decreases of 22.3 percent in lumber and building materials, 14.2 percent in auto sales, and 11.8 percent in furniture sales contributing most to the decline. The 0.4 percent increase in sales of nondurable goods over the 1986 total would have been more significant except for the 12.7 percent loss in sales of service stations and the 6.3 percent drop in general merchandise sales. Even the 5.2 percent increase in March sales (before adjustment for seasonal factors) was somewhat disappointing since normally total March sales rise by nearly 8 percent over February which left adjusted March sales nearly 2 percent below the February total.[1]

In spite of all the decreases noted in the major economic indicators there were a number of others that either remained stable or evidenced modest improvement. These latter indicators include bank clearings, local prime interest rates and others. These gains coupled with the increases noted above helped raise the average monthly General Business Index for the State to 93.1 which was 0.2 percent above that of the same period last year.

The Oklahoma General Business Index during the period 1980 to present is depicted in the Figure below.

Note

[1]A number of revisions have been made to the retail sales data. These revisions were necessitated by changes made in the classification of a number of retail businesses by the Oklahoma Tax Commission to more accurately reflect the types of merchandise sold by these stores.

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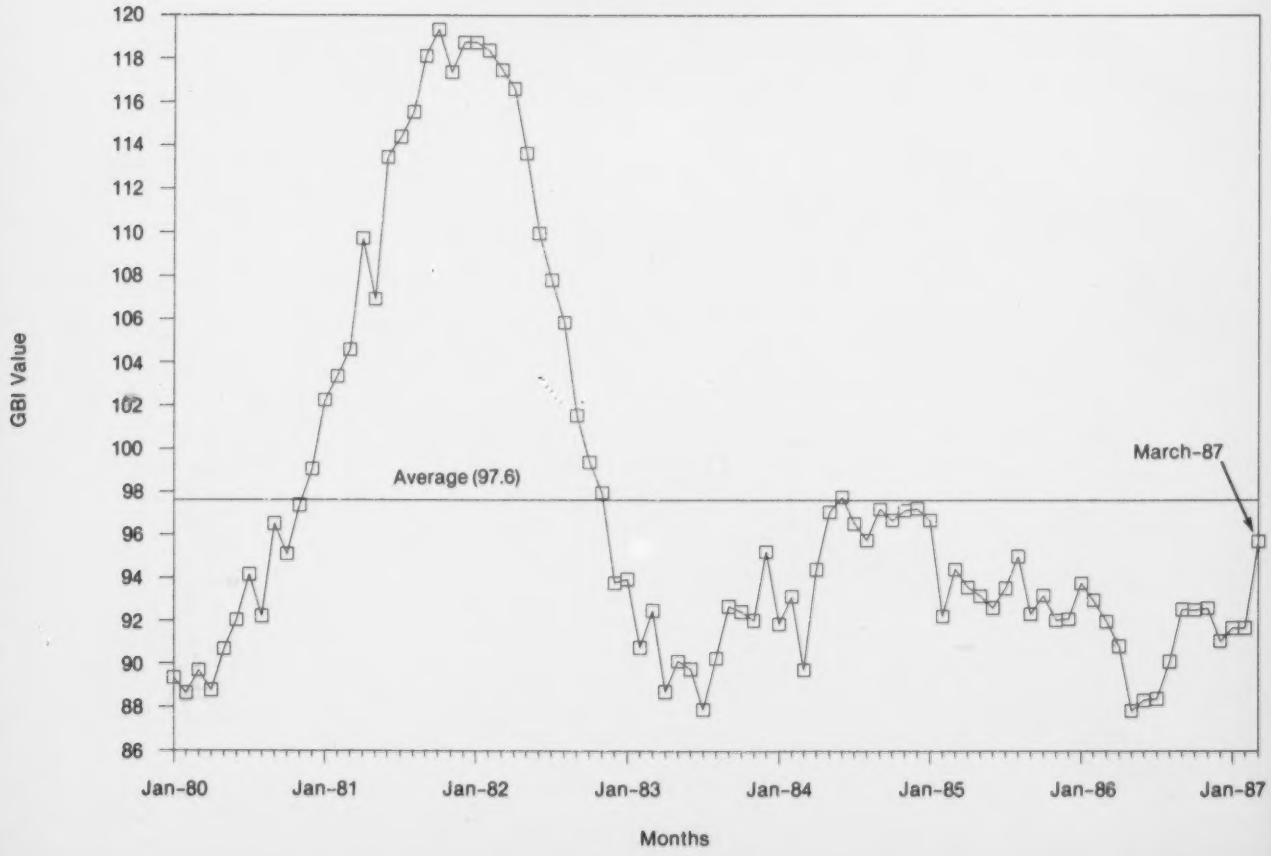
FIGURE 1

Oklahoma State General Business Index
January 1980 through March 1987



The Impact of Firm Performance and Structure on Dividend Policy

Peggy J. Crawford
Anne M. Turner

Introduction

The issuance of stock dividends has been a controversial business practice since the earliest days of corporate experience. The problem centers around the value of the stock dividend to the investor. Stock dividends do not appear to increase the wealth of the shareholder because each shareholder receives a percentage of stock based on his/her current holdings. Therefore, the investor still owns exactly the same proportion of the firm following the stock dividend distribution that he/she did before. In addition, the issuance of stock dividends may actually decrease the value of the company because of the costs associated with the transaction.[1]

A search of the academic literature finds little support for shareholders benefiting from stock dividend distribution. Empirical evidence suggests that the diluting effect of stock dividends causes a proportional decline in share prices. Researchers have found that the market values of stocks adjust almost immediately to stock splits and that neither the size of the issue nor the name given to it (stock split or stock dividend), makes any difference. Therefore, the stockholders do not benefit from the issue because of the market's efficient adjustment of price to asset value.[2] Eugene Fama states that expected returns cannot be increased by purchasing split securities after splits become effective. On the average the returns immediately resume their normal relationship to market return. Any gain is only by prediction or superior information, not by the split itself.[3]

However, stock dividends are a common business practice and arguments for issuance are found in corporate surveys questioning this practice.[4] One stated reason for cash dividends is the conservation of cash by not giving cash dividends. However, cash conservation is the result of not giving cash dividends, not the result of giving stock dividends. A second stated reason is the increased marketability by keeping the stock price in an attractive range and thereby gaining stockholders. But, a lower market price may not be as important today as it was in the past because of the dominance of institutional investors who buy in large increments. Higher market prices may be preferred because they lower transaction costs for the institutions. A study investigating the impact of stock splits on share marketability suggests that there is a permanent decrease in the relative marketability (liquidity) following the split.[5] A last reason mentioned is the perceived popularity of issuance with stockholders. Investor appreciation of stock dividends implies that the investor does not realize that his position in the company does not change. This is not consistent with the concept of the rational investor or efficient markets.[6]

If there is no empirical support for stock dividends and it is difficult to support the reasons given by corporate managers for this practice, the question is why do firms give stock dividends. This study will examine the hypothesis that firms who give stock dividends differ either financially or structurally from firms who give cash or no dividends.

Data

To determine whether or not firms with various dividend policies differ, financial data were collected for 60 firms during the five-year period 1978-1983. The firms were divided evenly into the following groups:

Group I	Firms that have a record of issuing stock dividends, and no other dividends, over the five-year period.
Group II	Firms that have consistently given cash dividends over the five-year period.
Group III	Firms that have given neither stock nor cash dividends over the five-year period.

Firms in each group were matched as closely as possible as to size, industry, and trading exchange to minimize the impact of these variables.

The variables selected to compare the firms include:

Variable		Description	Purpose
1. Current Ratio	=	$\frac{\text{Current Assets}}{\text{Current Liabilities}}$	This ratio describes the ability of the firm to meet its current obligations, i.e., a measure of liquidity. End of the year reporting figures were used.
2. Debt/Equity	=	$\frac{\text{Total Debt (LT)}}{\text{Total Equity}}$	This ratio describes the amount of the firm's debt financing to the amount of owner financing. This is used as a measure of comparative risk. End of year reporting figures were used.
3. Price/Earnings	=	$\frac{\text{Price/Share}}{\text{Earnings/Share}}$	This multiple indicates the value placed by investors on a dollar of a firm's earnings. This will be used to assess the investors' (market's) perception of the firm's value. The weighted averages of the high and low P/E ratios for the year were used.
4. Price Change	=	$\frac{\text{High Price - Low Price}}{\text{High Price}}$	Since stockholders are averse to uncertainty this is another measure of risk.

Additionally, the compound growth rate over the five-year period for the following four variables was calculated: (1) total assets; (2) earnings; (3) return on equity; and (4) return on assets. These variables were selected to test whether or not stock dividend and/or no dividend firms were "growth" firms. That is, did their growth rates greatly exceed those of the cash dividend firms?

To perform the analysis, one-way analysis of variance (ANOVA) between the means of the financial performance variables was performed. ANOVA is a statistical technique which determines whether observed difference among more than two sample means can be attributed to chance, or whether they are indicative of actual differences among the means of the corresponding populations. To test for significant differences between groups for each variable, the F test at the 5 percent confidence level was used. That is, we can report our results with a 95 percent confidence.

Results

The results of the analysis are listed in Table 1. An examination of the results indicates the following.

The current ratio of the stock dividend firms and the no dividend firms, (Groups I and III), have steadily increased over the years 1979-1983. The ratios of the cash dividend companies, (Group II), have been consistent (Graph 1). In four of five years the standard deviation of the means have shown few differences between firm groups. The stable and somewhat higher current ratios of the cash dividend companies may be necessary because of the cash-on-hand needed for dividends, and/or could suggest that these firms are not utilizing their assets to the maximum. There is virtually no difference in 1983 between groups. In other years the ratios of the no dividend group are slightly lower than those of the other groups. This suggests that during this time period the firms differ little in liquidity, as measured by current ratio, across groups.

Although statistically significant differences were not demonstrated in most years, visually there appears to be a trend toward consistently lower D/E ratios for the cash dividend firms (Graph 2). This suggests that firms issuing the cash dividends may enjoy lower long-term risk and lower returns consistent with lower leveraging. Note the D/E ratios in years 1982 and 1981 for the stock dividend and no dividend companies. This is possibly related to the economic conditions of those years. Statistically significant differences were demonstrated in 1980 between cash dividend companies and no dividend companies and in 1979 between cash dividend firms and both no dividend and stock dividend firms. This suggests that in terms of statistical significance, the firms' long-term risks associated with debt are similar in three of five years, but the obvious trend toward lower debt as proportion of equity for cash dividend firms is noteworthy and suggests a need for further investigation.

Statistically significant differences in the means of the percentage price change were demonstrated between the cash dividend companies and both stock dividend and no dividend firms in 1980. The cash dividend firms appear to exhibit significantly less price change volatility than firms in the other two groups (Graph 3). Assuming that stockholders regard price uncertainty as risky, investors should require a higher return from no dividend and stock dividend companies than from cash dividend firms, all other factors, (such as growth, earnings, other riskiness, etc.), being equal.

The firms that issue stock dividends were found to have P/E ratios higher than both cash dividend and no dividend firms (Graph 4). Statistically significant differences were demonstrated between stock dividend and cash dividend firms. Note that the P/E ratios were con-

TABLE 1

Summary Statistics for Various Dividend Policies—Stock Dividend, Cash Dividend, No Dividend

		Mean			Standard Deviation		
Ratio	Year	Stock	Cash	None	Stock	Cash	None
P/E Ratio	1983	23.10	15.65	19.60	10.96	6.53	7.62
Price Change	1983	0.4810	0.4070	0.4835	0.1188	0.1037	0.1240
	1982	0.5750	0.4335	0.5655	0.1414	0.1314	0.1462
	1981	0.4870	0.3600	0.4880	0.1401	0.1616	0.1152
	1990	0.5137	0.4611	0.5489	0.2130	0.1342	0.0985
	1979	0.4871	0.3821	0.5065	0.1322	0.1272	0.1277
Current Ratio	1983	2.89	2.86	2.87	1.29	1.80	1.56
	1982	2.86	2.86	2.56	1.46	1.79	1.19
	1981	2.80	2.95	2.16	1.21	1.96	1.03
	1980	2.50	2.76	2.13	1.00	1.71	1.13
	1979	2.22	2.70	1.92	0.93	1.40	1.08
Debt/Equity	1983	0.8977	0.6544	0.9898	1.1838	0.9448	1.1538
	1982	0.8567	0.6054	0.7398	1.0910	0.8273	0.9218
	1981	0.7328	0.5828	0.7966	0.7192	0.7583	0.8320
	1980	0.9505	0.5480	1.0743	0.8750	0.5828	0.9613
	1979	0.9927	0.5172	1.0739	1.0874	0.6253	0.6500
Total Assets (growth)	—	.444	.1498	.2900	.4455	.1180	.4603
Earnings (growth)	—	.2881	-.2875	.3336	.6091	.1518	.8932
Return of Equity (growth)	—	.1468	-.1259	.4486	.6885	.1559	.8697
Return on Assets (growth)	—	.1419	-.1291	.3762	.5969	.1913	.7753

siderably more volatile for the stock dividend firms than for the ratios of the other firm groups as indicated by the standard deviations of the means. This suggests that the stockholders value the future returns of firms that issue stock dividends significantly higher than the future returns of cash dividend firms and somewhat higher than the future returns of no dividend firms. This cannot be explained by the other variables selected for this study. The results suggest that there is something else about firms issuing stock dividends that explains the higher valuation placed on them by the market, and makes these stocks perceived as more attractive investments.

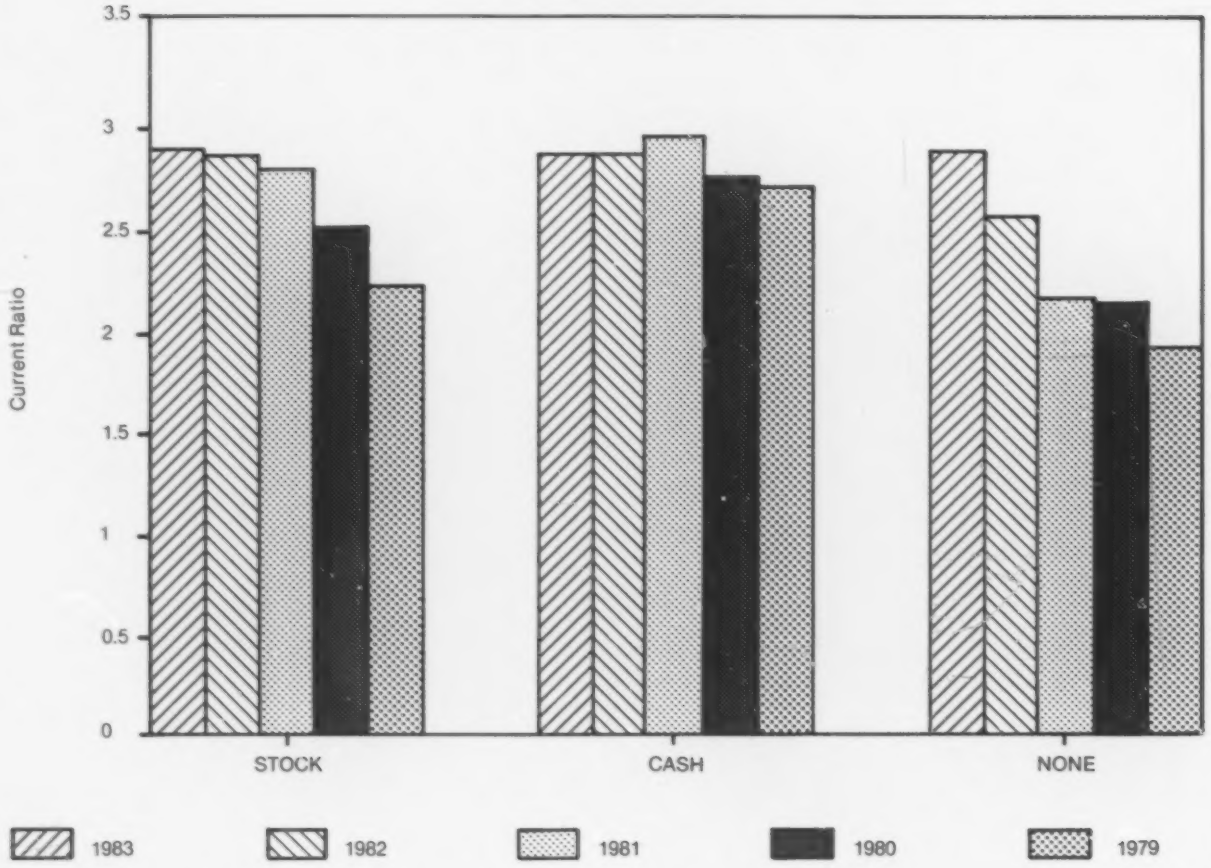
The average compound growth rate of total assets over the five-year period was highest for the stock firms while the growth rate in earnings was highest for the no dividend firms. In both cases, the growth rates for the stock and no dividend firms were statistically significantly different from those of the cash firms, but not different from each other. The average compound growth rate of return on equity and return on assets was highest for the no dividend firms; the returns were significantly different for the cash and no dividend firms. These results were interesting because, as one might expect, the high growth firms were not paying out cash dividends but rather retaining the funds to support the growth. However, the results imply that the more profitable firms (as measured by return on equity and assets) were the no dividend firms, not the stock dividend firms. This result lends some support to the idea that stock dividends may be costly to the firm.

Conclusion

This study compares financial and structural variables for firms with various dividend policies. The authors found little difference in the liquidity of the firms in the sample, that cash dividend firms tended to have lower amounts of debt in their capital structure, that the prices of cash dividend funds tended to be less volatile than the prices of the other two groups, and that stock and no dividend firms had the highest growth rates, but no dividend firms were the most profitable. The most intriguing, and as yet unexplained, result was that the price-earnings ratio for firms which gave stock dividends was higher than the price-earnings ratio for the other two groups. This suggests that there are other as yet unidentified factors which are prevalent in the stock dividend firms and make them more desirable to investors.

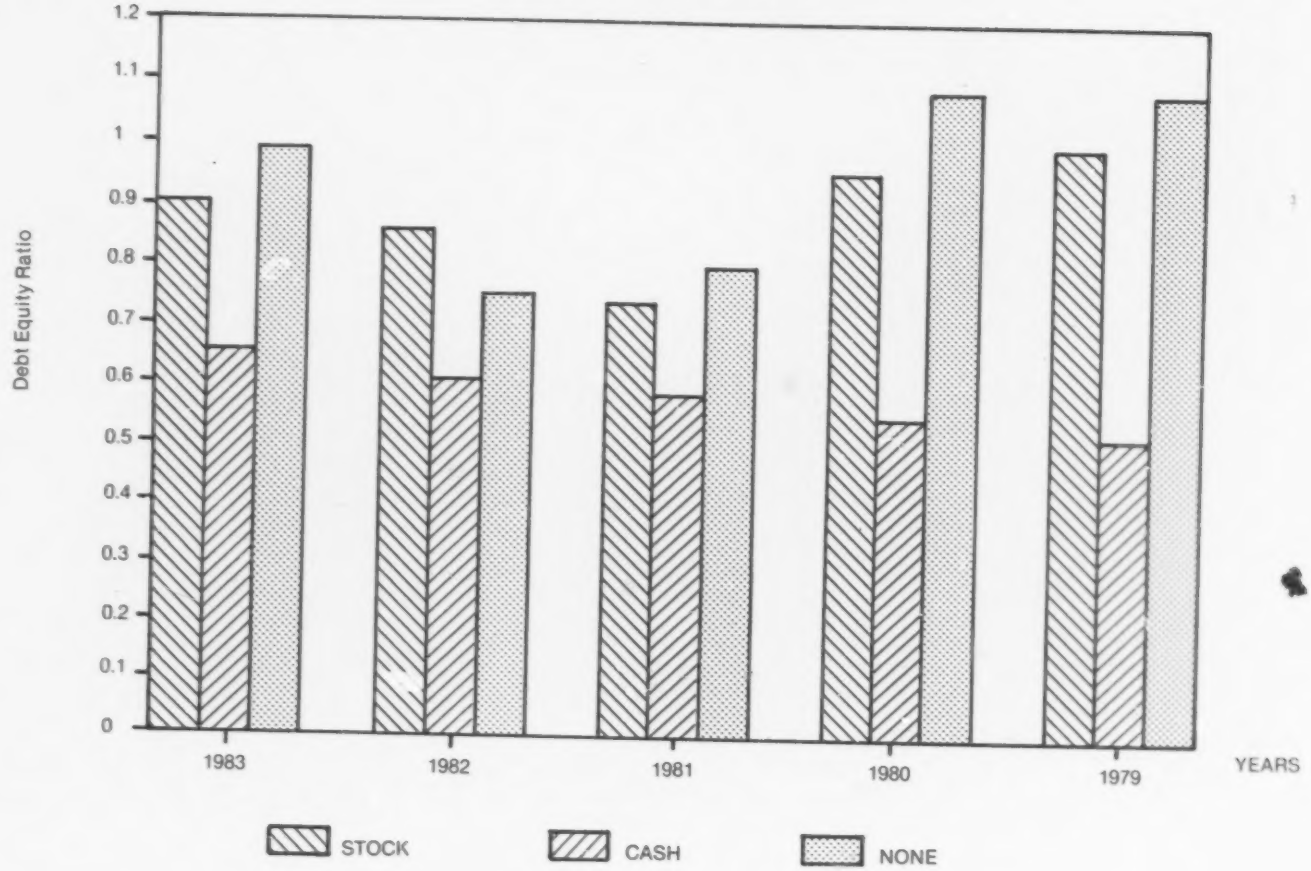
GRAPH 1

Average Current Ratio for Various Dividend Policies—
Stock Dividend, Cash Dividend, No Dividend



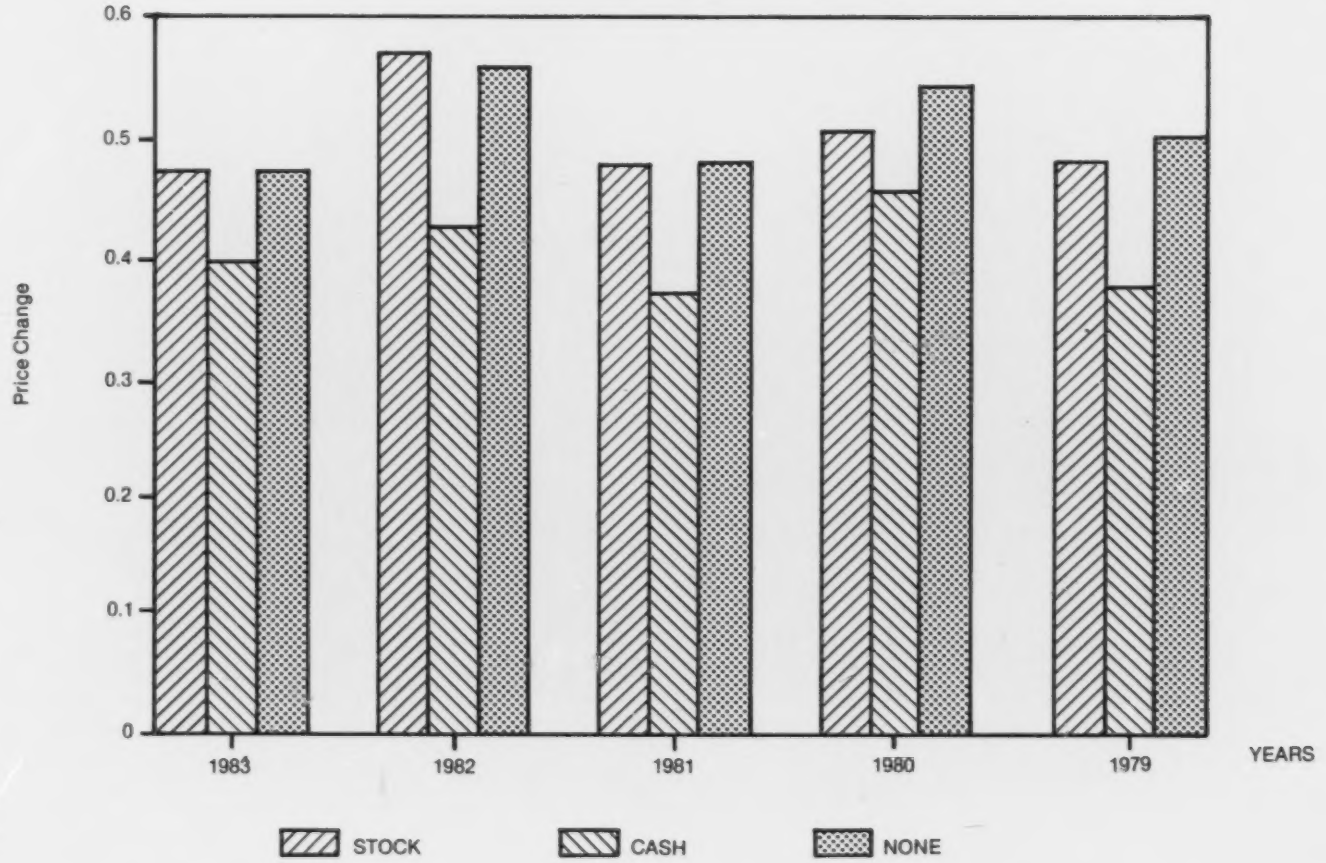
GRAPH 2

Average Debt/Equity Ratio for Various Dividend Policies—
Stock Dividend, Cash Dividend, No Dividend



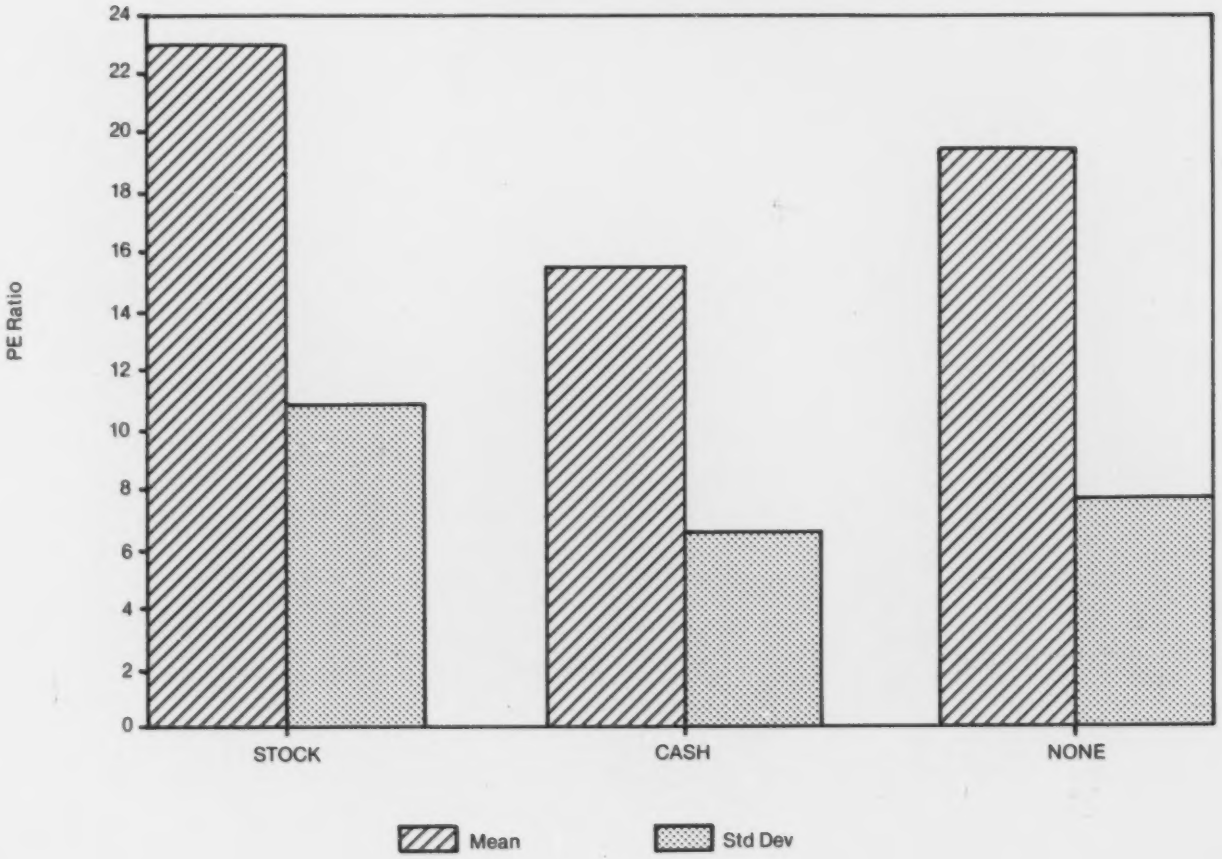
GRAPH 3

Average Price Change for Various Dividend Policies—
Stock Dividend, Cash Dividend, No Dividend



GRAPH 4

Average Price/Earnings Ratio for Various Dividend Policies—
Stock Dividends, Cash Dividends, No Dividends



Notes

[1]L.S. Hayes, "The Myth of the Stock Split," *Fortune* (February 1979), pp. 101-102.

[2]S. Chottiner and A. Young, "A Test of the AICPA Differential Between Stock Dividends and Stock Splits," *Journal of Accounting Research* (Autumn 1971), pp. 367-374; T.W. Foster III and D. Vickery, "The Information Content of Stock Dividend Announcements," *Accounting Review* (April 1978), pp. 360-370; S. Livermore, "Value of Stock Dividends," *American Economic Review* (December 1930), pp. 687-691; J.A. Miller, "Split or Dividend: Do the Words Really Matter?" *Accounting Review* (January 1977), pp. 52-55.

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[6]W. Nichols and S. Brown, "Assimilating Earnings and Split Information," *Journal of Financial Economics*, Vol. 9 (September 1981), pp. 310-315.

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How the Tax Reform Act of 1986 Will Stimulate Capital Investment: A Commercial Real Estate Example

Fred Hendon
Chad Denson
Gene Grant

Introduction

The purpose of this article is to assess the impact of the 1986 Tax Reform Act on the profitability of corporate investment in commercial real estate ventures.

In recent months there has been an extensive discussion in business publications about the effect of tax reform on the economy. In general, the consensus of opinion seems to be that the average consumer will be marginally better off, but that corporate investment will be negatively impacted by recent changes in the tax code. Specifically, it is alleged that long-term business capital formation will be adversely affected. The principal reason cited is that the detrimental effects of the elimination of the investment tax credit and lengthening of depreciable asset lives will more than outweigh the reduction in corporate tax rates. Many observers have concluded that the more capital intensive the business operations are, the more severely tax reform will retard corporate investment in new capital. Many writers have gone further and voiced the opinion that commercial real estate projects will be the most negatively impacted.

Throughout these discussions there seems to be a lot of attention devoted to opinion and almost none to analysis. Therefore, this article will compare the profitability of a hypothetical real estate investment project (such as office buildings, hotels, etc.) under the old corporate tax law and again under the new provisions using the well known capital budgeting technique of Net Present Value (NPV). This technique calculates the "net present value" after taxes to a firm for any investment prospect being considered. A positive (negative) figure would indicate an increase (loss) in value of the firm as a result of asset acquisition. If it can be shown for a given set of hypothetical cash flow data that NPV is higher under the new corporate tax provisions than under the previous tax law, then tax reform may stimulate corporate commercial real estate investment rather than reduce it.

Analysis Under Prior Tax Law

The assumed cash flow data for a hypothetical commercial development is as follows (dollar figures are in 000,000's):

Cost of Project	$100	
Asset Life (real)	35	years
Annual Incremental Earnings Before Depreciation and Taxes	$ 50	
Discount Rate	10	percent
Investment Tax Credit (10%)	$ 10	
Net Cost	$ 90	
Depreciable Base	$ 95	

Note that under the old law the investment tax credit was 10 percent, and real estate could be depreciated off over 19 years under the ACRS system. The corporate tax rate was 46 percent. Table 1 presents the calculations of net present value of the assumed project under the old tax law.

Table 1 shows that the present value of the cash flows over the 35-year life is $282.6 million. Subtracting the $90 million net cost from this figure leaves a NPV of $192.6 million.

Analysis Under New Tax Law

Under the new tax law, the depreciable asset life of non-residential property increases from 19 to 31.5 years. Moreover, write-offs for real estate are no longer accelerated (as under prior law) but are limited to straight line depreciation. The new law also eliminates the investment tax credit and lowers the corporate tax rate to 34 percent.

Using the same cash flow and cost figures as above, Table 2 presents the calculations of NPV under the new tax law (in 000,000's).

Table 2 indicates the present value of the incremental cash flow is $328.7 million. From this is subtracted $100

TABLE 1

Net Present Value Commercial Real Estate Project: Old Tax Law

Year (1)	Earnings Before Depreciation and Taxes (2)	Depreciation (3)	Earnings Before Taxes (4)	Taxes (46%) (5)	Earnings After Taxes (6)	Cash Inflows (7)	Present Value Factor (10%) (8)	Present Value (9)
1	$50.0	$8.4	$41.6	$19.1	$22.5	$30.9	0.909	$28.1
2	50.0	8.0	42.0	19.3	22.7	30.7	0.826	25.4
3	50.0	7.2	42.8	19.7	23.1	30.3	0.751	22.8
4	50.0	6.6	43.4	20.0	23.4	30.0	0.683	20.5
5	50.0	6.0	44.0	20.2	23.8	29.8	0.621	18.5
6	50.0	5.4	44.6	20.5	24.1	29.5	0.564	16.6
7	50.0	4.9	45.1	20.7	24.4	29.3	0.513	15.0
8	50.0	4.5	45.5	20.9	24.6	29.1	0.467	13.6
9	50.0	4.0	46.0	21.2	24.8	28.8	0.424	12.2
10	50.0	4.0	46.0	21.2	24.8	28.8	0.386	11.1
11	50.0	4.0	46.0	21.2	24.8	28.8	0.350	10.1
12	50.0	4.0	46.0	21.2	24.8	28.8	0.319	9.2
13	50.0	4.0	46.0	21.2	24.8	28.8	0.290	8.4
14	50.0	4.0	46.0	21.2	24.8	28.8	0.263	7.6
15	50.0	4.0	46.0	21.2	24.8	28.8	0.239	6.9
16	50.0	4.0	46.0	21.2	24.8	28.8	0.218	6.3
17	50.0	4.0	46.0	21.2	24.8	28.8	0.198	5.7
18	50.0	4.0	46.0	21.2	24.8	28.8	0.180	5.2
19	50.0	4.0	46.0	21.2	24.8	28.8	0.164	4.7
20	50.0	0.2	49.8	22.9	26.9	27.1	0.149	4.0
21	50.0	0.0	50.0	23.0	27.0	27.0	0.135	3.6
22	50.0	0.0	50.0	23.0	27.0	27.0	0.123	3.3
23	50.0	0.0	50.0	23.0	27.0	27.0	0.112	3.0
24	50.0	0.0	50.0	23.0	27.0	27.0	0.102	2.8
25	50.0	0.0	50.0	23.0	27.0	27.0	0.092	2.5
26	50.0	0.0	50.0	23.0	27.0	27.0	0.084	2.3
27	50.0	0.0	50.0	23.0	27.0	27.0	0.076	2.1
28	50.0	0.0	50.0	23.0	27.0	27.0	0.069	1.9
29	50.0	0.0	50.0	23.0	27.0	27.0	0.063	1.7
30	50.0	0.0	50.0	23.0	27.0	27.0	0.057	1.5
31	50.0	0.0	50.0	23.0	27.0	27.0	0.052	1.4
32	50.0	0.0	50.0	23.0	27.0	27.0	0.047	1.3
33	50.0	0.0	50.0	23.0	27.0	27.0	0.043	1.2
34	50.0	0.0	50.0	23.0	27.0	27.0	0.039	1.1
35	50.0	0.0	50.0	23.0	27.0	27.0	0.036	1.0
Total present value	$282.6							
Less net cost	90.0							
Net present value	192.6							

TABLE 2

	Years 1-32	33	34	35

million original cost giving a NPV of $228.7 million. Compared with results under the old tax law, tax reform yields an increase of $36.1 million in NPV or an increase of approximately 19 percent.

Conclusion

As the above calculations show, changes in the business tax provisions contained in the Tax Reform Act of 1986 have a significant positive impact on the NPV of cash flows compared with prior tax law for non-residential real estate. The results seem to contradict the opinions of the majority of recent writers on the subject. Although this analysis assumed hypothetical data, it made a comparative evaluation of the three most important changes in business taxes embodied in tax reform—elimination of ITC, lengthening of depreciable asset lives, and reduction in corporate tax rates.[1] The results suggest that recent pessimism with regard to tax affects on the profitability of new commercial real estate projects may be premature. In the opinion of the authors, it would be advisable for all corporate real estate developers to systematically re-evaluate projects in light of changes in the tax code. Based on the results of the comparative NPV analysis of this study, the Tax Reform Act of 1986 may provide a significant stimulus for corporate commercial real estate investment in the future.

Note

[1]Elimination of the capital gains tax preference will have a detrimental effect on the after-tax returns of stockholders, possibly causing a decrease in the value of investing in corporations. However, the effect of such a change is not explicitly relevant to NPV computations, and is, therefore, not considered in this analysis.

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